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AUTHOR	Hofmeister, Alan M.; Atkinson, Charles M.
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ABSTRACT

Described is Project TELEPAC, a telecommunications-based system which provides instructional packets to parents of severely handicapped children in rural areas of Utah. In addition to the parent involvement packets which outline teaching methods, correction procedures and behavior management practices for arithmetic, language arts, self help and recreation/leisure time skills, the TELEPAC model is said to offer a parent resource library, multimedia collection, and resource directory for services in the state. Toll-free telephone lines are explained to give the parent direct access to a TELEPAC resource teacher. (CL)

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Utah State University
Exceptional Child Center
Logan, Utah 84322

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The TELEPAC Project:

A Service Delivery Model for the Severely Handicapped In Rural Areas

Alan M. Hofmeister, Project Director

Charles M. Atkinson, Assistant Director

Research Assistants:

Forest J.C. Hertlein
Dean E. Konopasek
Stephen W. Stile

Master Teachers:

Jackie Midzinski
Ann Porcella
Timm Vogelsburg

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A Service Delivery Model for the Severely Handicapped In Rural Areas

Alan M. Hofmeister

Charles M. Atkinson

A major problem encountered in attempts to provide services to the severely handicapped child in rural areas is the lack of specialized facilities. In urban areas, the population is often sufficient to support a centralized facility which (1) provides specialized personnel and services for the handicapped child, and (2) provides resources and training to the educator not specifically trained to meet the needs of the child with severe handicaps. The problems of time and distance associated with rural areas make the cost factor so high that centralized facilities have difficulty meeting the day to day training needs of children living in sparsely populated areas. The Utah State University TELEPAC Project is a service delivery model which makes use of: (1) telecommunication technology, (2) parents as a basic treatment resource, and (3) the technology of instructional packaging.

A program which used telecommunications to make effective use of the limited number of professional personnel available in rural areas appeared to be one means of reducing the effects of

time and distance problems. Ghatala and Wedemeyer (1973) made the following observation:

> Telecommunications, properly used, can be one of the most effective tools for distant teaching and learning yet employed. Educational communications offers a unique way to provide opportunities for learning to large numbers of spatially separated learners ... Appropriate application of media, technology, and communications to education is capable of individualizing, humanizing, personalizing, and optimizing instruction and learning. (p. 63)

A comparatively recent development in the field of instructional technology is that of "package" development. Instructional "packages" allow the developer to have an impact without being present. In Project TELEPAC, the technology of package development is being used to advantage in overcoming some of the problems associated with instruction in rural areas.

Among the untapped manpower resources of rural areas are the parents or other members of the child's family. A training program which utilized local resource personnel (e.g. educators and public health nurses) and parents and had a low initiation and maintenance cost would be consistent with resources available in the rural setting.

The TELEPAC Project is presently in the summative evaluation phase. In developing and assessing the different components of the service delivery model, the following factors were taken into consideration.

(1) Limited funds suitable for continuation after expiration of development funds.

(2) Limited availability of professionals.

(3) Limited hardware servicing facilities.

(4) Relatively low level of development in curriculum programming and validation for the severely handicapped (the history of instructional technology is replete with examples of ineffective instruction being mediated by sophisticated hardware systems).

(5) Need for highly individualized approaches.

(6) Limited response capability of the severely handicapped child.

(7) Limitations imposed by time and distance factors in sparsely populated areas.

After reviewing a variety of telecommunications possibilities, it was felt that the standard telephone system was the most appropriate telecommunication system for rural areas.

Despite the availability of the telephone to the education profession, Rao and Hicks (1972) note, "The educational enterprise in North America, in spite of its heavy dependence upon the telephone for administrative communications, does not seem to have realized the potential of the telephone as an instructional communications device (ICD). There have been few cases where the telephone was used as an ICD with fruitful results, and its full potential has yet to be explored." (p. 18)

The Telephone and the Handicapped

A California telephone company offers a special service called

"Teleclass." At the request of a parent, a "telephone teacher" calls a handicapped or homebound youngster on the telephone at a regular time each day. The teacher conducts a class over the phone with one child or as many as 20 children simultaneously. Equipment can be modified to accomodate youngsters with motor disabilities. This service is available at monthly rates. One school district using this telephone service is the Oakland District, which developed the elementary Tele-Teaching Program (Steele, 1969).

In Illinois, the telephone company is conducting a program called "home to school" service. Selected classrooms have been fitted with special portable telephones that are connected by ordinary telephone lines to the home telephone of a handicapped or bedridden child. A special microphone at the teacher's end picks up all classroom discussion so the home student can hear his classmates, as well as his teacher. Modified "talk-listen" switches permit disabled youngsters to operate the equipment (Lewis, 1971).

As one reviews the literature on the use of the telephone with the handicapped, a clear and unfortunate pattern emerges - the severely mentally and emotionally handicapped child has been virtually totally ignored. School districts have screening techniques designed to make sure that only chronically ill and physically handicapped participate in the telephone related programs. The reason for exclusion of the severely mentally and emotionally handicapped appears essentially

to be the same as used for segregating the less handicapped child attending school; namely, an attitude which states "you are not welcome if you are not able to fit in with the instructional processes that exist in the traditional classroom."

Parents and Remediation

There is a trend on the part of school programs to involve parents in strategies for changing the behaviors of their children. Lloyd (1965) described a program in the New York City schools which involved parents in teaching their children to read. One parent tutoring program's success in increasing children's reading skills led to its being extended to six public and seven parochial schools in the community (Pollack, 1969).

The emergence of behavior modification as a treatment technique, and the use of nonprofessionals, especially parents, has added a new dimension to the prevention and remediation of educational problems of students (Clement, 1971: Latham, 1971; Patterson & Cobb, 1972).

Efforts to train parents to alter the behavior of their own children in the home have led to the development of both intervention procedures and programs for training of nonprofessionals. Ray (1965) trained four mothers of atypical children (mentally retarded, autistic, etc.) to use techniques of behavior management. Similar techniques were used by Morrey (1970) in an attempt to increase parents' ability to manage children at home. He successfully trained parents to manage selected

behaviors of their mentally retarded children.

Smith and Brahce (1963) reported that parents can make positive changes in children's learning. The essential components of the program they described were parent meetings and getting parents to work with other parents. Their research indicated overall gains for the children of 5.4 months in reading during a five month treatment program. Children in the control group gained 2.7 months in reading during the same period. Luszki and Schmuck (1965) reported improved functioning in school and greater "self-esteem" for elementary school students who perceived their parents as being supportive of school activities. Their results indicated that parental support of school was more important in the elementary school years.

Most of the attempts to train parents to manage their children have required the presence of a professional leader. Within the last six years, several training texts have been published by professionals for parents. These publications were designed to train, or suggest methods to parents for better home management. The Krumboltz and Krumboltz (1972) text, Changing Children's Behavior, gives principles and actual examples on how to change inappropriate behavior. Illustrations are based on real happenings, such as "generating enthusiasm for school", "learning to enjoy reading", "improving mathematical skills", and many other management situations parents and educators are often confronted with. Patterson (1971) published a text Families. This text for parents and professionals is based on Patterson's research in the area of "social

learning technology". Becker's (1971) book Parents are Teachers was designed to be used by either professionals in parent training programs or independently by parents. The objective of Becker's manual was to teach parents to use positive reinforcement systematically in raising their children. Zifferblatt (1970) published a book to guide parents in techniques of reinforcing the study behaviors of their children and in scheduling study times. Patterson and Gullion (1968) published a program text for parents. This text, Living With Children, programmed techniques for parents to use in managing the "problem" behaviors of their children. In 1966, Smith and Smith published a self-instruction booklet with a discussion guide for parents.

Some of the most substantial efforts in the area of the severely retarded have been those generated by a team of program developers at Teaching Research, Monmouth, Oregon (Baldwin, Fredericks, & Brodsky, 1973).

The above mentioned studies are representative of the more recent attempts to train parents in the management of their children. The most replicable programs appear concerned with decreasing inappropriate social behaviors. Many of the studies included the heavy involvement of professional personnel and resources outside that available to the rural school district. A serious deficiency in several of the programs was the lack of replicable skill oriented programs for parents of the severely handicapped child.

Project TELEPAC: Program Description

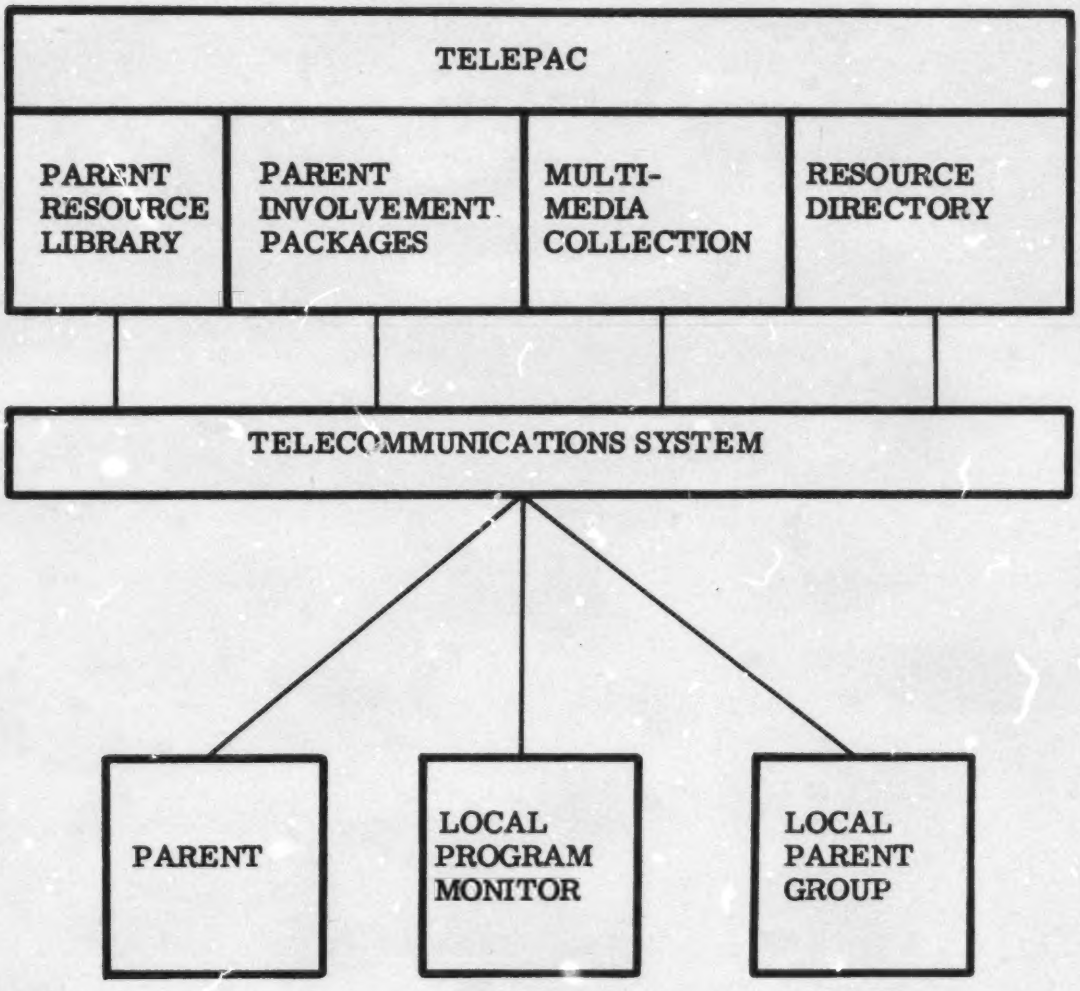
The basic components of Project TELEPAC are outlined in Figure 1. TELEPAC has four components: (1) The Parent Resource Library, (2) The Parent Involvement Packages, (3) The Multi-Media Collection, and (4) The Resource Directory. These four components are provided to the home, a local program monitor, and local parent groups through toll-free telephone lines (telecommunications system).

TELEPAC is the basic source of administrative and instructional management. This project is located in the Exceptional Child Center at Utah State University and serves as the base for program development and validation as well as service. The Center is available to serve in a demonstration capacity in the same way as it operates demonstration programs in the treatment of the severely retarded, the hard of hearing, and the emotionally disturbed. The following are the major divisions of TELEPAC:

Parent Involvement Packages: The staff is responsible for the development and dissemination of Parent Involvement Packages. Each package provides the parent with a direct instructional procedure (scripted format) for introducing and teaching an unmastered skill or concept to his child. Correction procedures and techniques for providing practice in the new skill or concept are also specified for the parent. Child management procedures are tied directly to the teaching sequences via suggestions for praising at specified points and suggestions for employing token economies within the teaching sequence. Pre/posttest criterion referenced tests and administration procedures for continuous progress

Figure 1

BASIC COMPONENTS OF
THE SERVICE DELIVERY SYSTEM



monitoring add to the child management effectiveness. Parent Involvement Packages have been written in the curriculum areas of arithmetic, language arts, self-help skills, and recreation/leisure time. The curriculum was not meant to be comprehensive, but is sufficient to provide validation data on the service delivery model in both academic and self-help areas.

Parent Resource Library: Because the packaged curriculum is not fully comprehensive, a set of books and pamphlets is used to supplement the training needs of parents. The Parent Resource Library consists of materials carefully screened and selected to provide practical "how to" content.

Multi-Media Collection: Like the Parent Resource Library, the Multi-Media Collection is designed to provide parents with a training materials resource supplemental to the more specific Parent Involvement Packages. The collection consists of slide/sound sets, films, records, tapes, and supporting paper-pencil materials that were selected because the content provides techniques for parents to use in teaching their severely handicapped child. Materials from the Multi-Media Collection are most often used in group settings, such as part of the program for a local Association for Retarded Citizens meeting.

The Resource Directory: Services for Handicapped Citizens in the State of Utah: The Resource Directory is utilized by the project staff to locate appropriate referral sources for parents of severely

handicapped children. Listed within the Resource Directory are consultant services in a wide variety of disciplines including medical services, religious counseling, recreation facilities, and respite care services. The directory is divided by county and cross-indexed for easy reference.

Telecommunications System: A Wide Area Telecommunications System (WATS) provides for a variety of interactions between the parent, TELEPAC Master Resource Teachers, a local program monitor (LPM) and a variety of consultant services. The utilization of standard telephones equipped with intercom speakers is consistent with the resources available in rural areas.

The Service Delivery Model: In order to achieve replication and a high level of exportability of the treatment processes, the components of the model emphasize the use of the Parent Involvement Packages. These packages provide for replicable administrative and training procedures at three levels: (1) the training of the handicapped child in the home, (2) the training of the parents, (3) the involvement of the local program monitor.

Training of Pupils: The training of the severely handicapped child is done by the parents or other member of the child's family. The curriculum and training procedures are presented and programmed by the Parent Involvement Packages. These packages are used in conjunction with school, day care, or sheltered workshop instruction where such placement is available.

Training of Parents: The training of the parents is also accomplished by the Parent Involvement Packages. Each parent Involvement Package trains the parents in: (a) direct teaching of selected skills, (b) supervision of practice of these skills, and (c) monitoring of pupil progress in the skills. Telephone conferences between the parent and the TELEPAC staff are an important component of both package development, evaluation, and ongoing service procedures.

Training of the Local Program Monitor: The Local Program Monitor (LPM) is a local educator, health or social worker. The LPM helps to coordinate (a) the identification and screening of potential families, (b) the notification and involvement of the parents, and (c) the liaison with the TELEPAC Master Resource Teacher. The LPM also receives information, help and training from the staff.

Telecommunications Interactions

The major thrust of the TELEPAC Project is the utilization of the telephone as a vehicle for the use and evaluation of packaged programs and other services. The toll-free WATS lines provide the parent with direct access to a resource teacher within TELEPAC. The parent calls the resource teacher, or the request for services is initiated by the LPM.

Many of the interactions between TELEPAC and the home are taken over by the LPM. Where possible, the staff attempts to encourage expertise, independence, and resource development at the local level.

It is not possible for the TELEPAC staff to provide all the services that are requested by the parent or LPM. One such service is the facility to respond to a wide range of health related requests. In such cases, TELEPAC establishes access to appropriate consultant services.

It is felt that this project, with its emphasis on the present form of telecommunications and the development of exportable multi-media programs and Parent Involvement Packages will enable effective use to be made of more comprehensive and elaborate telecommunication systems in the future.

Bibliography

Baldwin, V., Fredericks, H., & Brodsky, G. Isn't It Time He Outgrew This? or A Training Program for Parents of Retarded Children. Springfield, Ill.: Charles C. Thomas, Publisher, 1973.

Becker, W. Parents are Teachers. Champaign, Ill.: Research Press, 1971.

Clement, P. Please, mother, I'd rather you did it yourself: Training parents to treat their own children. The Journal of School Health, 1971, 23(2), 65-69.

Ghatala, M., & Wedemeyer, C. Telecommunications in education. Educational Technology, 1973, 13(4), 63.

Krumboltz, J., & Krumboltz, H. Changing children's behavior. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.

Latham, G. Mediated training packages: An approach to parent training. USU Special Educator, 1971, 6(3), 1-6.

Lewis, P. Telephone technology rings in more ways. Nation's Schools, 1971, 88, 50-52.

Lloyd, H. New York City's program for developing the role of parents in reading progress. Reading Teacher, 1965, 18, 29-33.

Luszki, M., & Schmuch, R. Pupil perceptions of parental attitude toward school. Mental Hygiene, 1965, 49, 296-307.

Morrey, J. Parental training in precise behavior management with mentally retarded children. Unpublished doctoral dissertation, Utah State University, Logan, 1970.

Patterson, G. Families: Applications of social learning to family life. Champaign, Illinois: Research Press, 1971.

Patterson, G., & Cobb, J. A social engineering technology for retraining the families of aggressive boys. In H. Adams and L. Unikel (Eds.), Georgia Symposium in Experimental Clinical Psychology. Springfield, Ill.: Charles C. Thomas, 1972.

Patterson, G., & Gullion M. Living With Children: New Methods for Parents and Teachers (Revised Edition). Champaign, Illinois: Research Press, 1971.

Pollack, C. Mass remediation of children's reading problems. Reading Teacher, 1969, 22, 715-719.

Rao, P., & Hicks, B. Telephone based instructional systems. Audiovisual Instruction, 1972, 17(4), 18-22.

Ray, R. The training of mothers of atypical children in the use of behavior modification techniques. Unpublished master's thesis, University of Oregon, Eugene, Oregon, 1965.

Smith, M., & Brahce, I. Focus on achievement. Educational Leadership, 1963, 63, 314-319.

Smith, J., & Smith, E. Child management. Ann Arbor, Michigan: Ann Arbor Publishers, 1969.

Steele, M. Teleteaching: A new form of home and hospital instruction. Audio Visual Instruction, 1969, 14(9), 80.

Zifferblatt, S. You can help your child improve study and homework behaviors. Champaign, Illinois: Research Press, 1970.